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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,852	12/28/2001	Amarendra K. Rai	UNI 0041 PA	9645

7590 11/18/2003
Killworth, Gottman, Hagan & Schaeff, L.L.P.
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Dayton, OH 45402-2023

EXAMINER

TURNER, ARCHENE A

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,852

Applicant(s)

RAI ET AL.

Examiner

Archene Turner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 36-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-35, drawn to a product, classified in class 428, subclass 336.
 - II. Claims 36-45, drawn to a method, classified in class 204, subclass 192.
2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a different method such as CVD.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their divergent subject matter, different classification and search, a restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Beyer on 11-12-03 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-35. Affirmation of this election must be made by applicant in replying to this Office action. Claims 36-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1,2, 19, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Niwa et al (6,001,470).

Niwa et al discloses the claimed zirconia and yttria coating on a substrate.

8. Claims 1,2,19,20,23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Sproul et al (5,789,071).

Sproul et al discloses the claimed oxide outer coating on a substrate.

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9. Claims 1-4,7,8,11-15,19,20,23,24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sarin et al (4,702,970 or 4,701,384).

Sarin et al discloses the claimed oxide over layer and metal compound under layer within the claimed thickness.

10. Claims 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (4,900,579) or Silney (4,728,448) or Van Wyk (3,755,164) or Toshiba Tungalloy (JP 62196351).

Lee et al or Silney or Van Wyk or Toshiba Tungalloy discloses the claimed metal fluoride and silver composition on a substrate.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarin et al (as above) in view of Hauzer Ind BV (DE 19818782) or Hitachi Tool (JP 08199341) or Braendle et al (6,274,249).

Sarin et al discloses the invention substantially as claimed except for the claimed layer containing Ti and Y. Both Hauzer Ind BV or Hitachi Tool or Braendle et al discloses the claimed mixed layer as an improvement over Ti compound layers.

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Thus it would have been obvious to one of ordinary skill in the art to substitute the Ti compound layer of Sarin et al, with the Ti Y compound layer of Hauzer Ind BV or Hitachi Tool or Braendle et al , as this layer is known to improve performance.

13. Claims 5,6,13,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarin et al (as above).

Sarin et al discloses the invention substantially as claimed, except for the specifics of the under layer. In the coating art, the claimed multilayered under layers and an additional layer is well known in the art to improve the performance of coatings in the tool art.

14. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (4,900,579) or Silney (4,728,448) or Van Wyk (3,755,164) or Toshiba Tungalloy (JP 62196351).

Lee et al or Silney or Van Wyk or Toshiba Tungalloy disclose the invention substantially as claimed except for the claimed thickness and interlayer. The claimed thicknesses are typical of coatings and using an additional layer between a coating and a substrate is known to improve adhesion of a coating.

15. Any inquiry regarding this communication or earlier communications from the Examiner should be directed to Archene Turner, whose telephone number is (703) 308-

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4344. The Examiner can normally be reached Monday to Thursday from 8:30 AM to 6:00 PM.

A facsimile center has been established for Group 1700, in Crystal Mall I. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 872-9306 for all official faxes. This location should be used in all instances when faxing any correspondence to Art Unit 1775.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



A. A. Turner
Primary Examiner
Group 1700

aat